POPULI

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People, Profit, and Planetary Ponderings

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Fondo de Población de las Naciones Unidas

POPULI

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READEX
FICHE

Mixed Blessings

"Democracy and the transition to capitalism are hurling Polish women... back, decades upon decades in time, into a frightening world of discrimination, prejudice and oppression," according to Patricia Clough of the *Independent* of London. She cites the views of Professor Eleonora Zielinska of Warsaw University's penal law institute and leading Polish feminist Jolanta Plakwicz, who in March reported to a Council of Europe conference that "the rejection of everything to do with communism has included...the very notion of women's rights." And Clough points to the statement of Marcin Libicki, a member of parliament of the Christian National Party, at the same conference. "We wish to return to the ethos of the woman as a mother," Libicki is quoted as saying. "Nature created women to bear children. Pregnancy is a blessing for them."

Meanwhile, the Polish Press Agency reports the founding of the Federation for Women and Family Planning in Warsaw. The Federation aims to promote family planning through publicity campaigns and legislative lobbying and to ensure access to family planning information and services. It was founded on 15 May by the Polish Women's League, the Polish Feminist Association, the Pro Femina Association, the Neutrum Association for a state with a "neutral world outlook," and the Polish section of the YWCA, or Young Women's Christian Association.

Cousteau to lecture

Renowned marine explorer and environmental educator Jacques-Yves Cousteau will speak about population and our planet at the United Nations in September. The president of the Cousteau Society, a non-profit environmental education organization, is slated to deliver the fourth Rafael M. Salas Memorial Lecture at UN headquarters in New York on 30 September. The lecture is named after UNFPA's first executive director.

From the Executive Director:

We are pleased to introduce the new POPULI *to readers of UNFPA publications.* POPULI *will maintain the standards set by the Fund's periodicals in a new, attractive format that addresses current communications needs.*

The new magazine is launched during a crucial decade during which the population decisions made—or not made—by governments, parliamentarians, NGOs, and ordinary people, will determine the quality of life for the planet. It is clear that communications will play a key role in informing people of the consequences of these choices, especially as we approach the 1994 International Conference on Population and Development. POPULI *will be a most important part of that communications initiative. We wish you pleasure in reading it.*

Dr. Nafis Sadik

To Our Readers —

Environment. Sustainable development. Resources. Carrying capacity. The buzzwords are flying as thousands of delegates, activists, and observers descend on Rio de Janeiro this month for the United Nations Conference on Environment and Development, also known as the "Earth Summit."

In this, the premiere issue of the new POPULI, we hope to make a modest contribution to the debate over our planet's future. A feature article by Dan Hinrichsen takes us to Indian villages where sustainable development—social and economic improvement based on appropriate technology, renewable resources, and enlightened human endeavour—is an unfolding way of life. He reports that the improved status, quality of life, and greater freedom earned by the women of Mayan village were both consequences and requirements of this alternative to conventional styles of development. And he finds that the community is now looking to preserve its gains through family planning.

"A new ethic is required and a new approach to the discharge of our duty to care for Earth and for ourselves," writes Nobel laureate Henry Kendall in a Viewpoints article. "Yet adopting a new ethic, and gaining the agreement of nations to move forward, are themselves daunting tasks." Professor Kendall, a physicist who chairs the Union of Concerned Scientists, admonishes decision-makers to pay due attention to the environmental impact of rapid population growth and human activities. He also warns us against relying on science and technology to provide "a 'magic bullet' that will allow us to avoid the threats that face us all." This view is shared by the Royal Society of London and the National Academy of Sciences in the United States. These institutions recently issued an unprecedented joint statement, "Population Growth, Resource Consumption, and a Sustainable World." Details of the statement are provided in our News department.

We hope you will find these articles, and the rest of this month's issue, interesting and useful.

Hirofumi Ando
Editor-in-Chief

About our paper: Some readers may have noticed that POPULI does not bear the now-familiar symbol for recycled paper. This is because we are trying to find a paper that lives up to its environmental promises, provides sufficient print quality, and falls within our budget. We were surprised to learn that recycled paper isn't necessarily what it's supposed to be. Environmental groups such as Greenpeace say we are being hoodwinked by loose industry standards. They point out that in the United States, for example, the Environmental Protection Agency requires that recycled printing paper contain at least 50 per cent recycled fiber, which could include industrial waste rather than true consumer waste that would normally end up in landfills. Indeed, many paper companies use mill trimmings and scraps to produce "recycled" paper. Our printers say the environmental benefits of recycling are cancelled in the chemical bath used paper receives to strip it of ink. Since petroleum-based inks are most common, toxic by-products are released during de-inking. And since chlorine is still used to bleach paper, another chemical predicament is dioxin— a highly carcinogenic by-product of the bleaching process. We hope to find the right paper soon. At any rate, we'll share with you what we learn.

Technical Trouble Shooters

Leaders have been found for five of eight new UNFPA Technical Support Services teams. The regional support teams consisting of trouble shooters from various academic and programme backgrounds, are being set up in response to a 1991 decision by the Fund's Governing Council, which sought to improve technical support to country programmes while cutting costs. The new teams, which replace a number of posts distributed among various UN agencies and regional bodies, are said by programmers to meet both conditions. In all, 164 experts are being assigned to the teams, which will be based in Addis Ababa, Dakar, and Harare in Africa; Amman in the Arab States; Bangkok, Kathmandu, and Suva in Asia and the Pacific; and Santiago in Latin America and the Caribbean. So far, five team leaders have been picked: Aderanti Adepoju in Addis Ababa, Atef Khalifa in Amman, Ghazi Farooq in Bangkok, Shahida Azfar in Kathmandu, and Joop Alberts in Santiago.

AIDS Events

The latter part of the year will see a number of conferences on Acquired Immune Deficiency Syndrome. Among them:

- Eighth International Conference on AIDS and Third Sexually Transmitted Diseases World Congress, 19-24 July, Amsterdam, Netherlands. Sponsored by the World Health Organization, the International AIDS Society, and Harvard University. For more information, contact: CLB, Plesmanlaan 125, Postbus 9190, 1006 AD Amsterdam, Netherlands. Telephone: 020-512-3224. Fax: 020-512-3332. Or: Harvard AIDS Institute, 8 Story Street, Cambridge, MA 02138, USA. Telephone: (617) 495-0478. Fax: (617) 495-2863.
- Second International Conference on AIDS and Street Youth, 4-5 September, Rio de Janeiro, Brazil. For more information, contact: HIV Adolescent Studies Group, 722 West 168th Street, Box 29, New York, NY 10032, USA. Telephone: (212) 740-7352. Or: Barow de Lucena, 32 Botafogo, Rio de Janeiro, Brazil 22260. Telephone: 55-21-266-0048.
- Fifth National Conference on AIDS: "Living with HIV—the Next Decade", 23-25 November, Sydney, Australia. For more information, contact: Family Planning Federation of Australia, P.O.Box 26, Suite 3, First Floor, LUA Building, 39 Geils Court, Deakin ACT 2600, Australia.

Too Explicit

AIDS prevention workers in the United States are angered over Centers for Disease Control (CDC) chief William Roper's decision, made late last year, to quash radio and television advertisements promoting condoms.

According to press reports, Roper decided to kill a series of ads planned and tested by federal health officials as part of a national AIDS prevention campaign, because he felt they were too explicit for the American public.

Instead, he decided to limit the government's US$1.5-million "America Responds to AIDS" campaign to general prevention messages that do not use humour and do not mention the words "condom" or "sex," as the cancelled ads did.

The cancellation has angered AIDS educators inside and outside the CDC, fuelling longstanding complaints that conservative political influence on the agency has blunted the effectiveness of its AIDS prevention efforts.

According to the *Washington Post*, one of the axed ads told parents: "Raise your kids your way. Teach them your family's values. Like keeping sex a part of marriage. Being grown up before sex happens. Whatever." But, the ad continued, also tell them about condoms, because "knowing about condoms doesn't mean you want your kids to leap into bed. It just means you want them to know."

Traineeships

The University of Southern California's Population Research Laboratory is offering two new Fred H. Bixby pre-doctoral traineeships in population policy. The traineeships include stipends, fees, and tuition, and are normally renewable for a second year. One of the trainees will be selected from a developing country, the other from an industrialized country. For more information, contact: Maurice D. Van Arsdol, Jr., Director, Population Research Laboratory, 3716 S. Hope Street, Room 385, Los Angeles, CA 90007-4377, USA. Telephone: (213) 743-2950. Fax: (213) 743-7408.

Teen Troubles

Three in ten Mexican women aged 15-19 years have unplanned pregnancies, according to Armando Torres, who heads the Special Services Division of the health ministry's National Prenatal Care Institute. He says a lack of information on and access to contraceptives, social pressure and the consequent desire to become pregnant, and dependence on their partners are the main reasons why young women do not use contraceptives or insist their partners do so.

World Population Day

Official observances of World Population Day (11 July) this year will include the screening of "Towards a World in Balance," a video looking at the entwined issues of population growth and sustainable development.

The video examines some of the options open to us to build a more durable future. Produced by UNFPA's Information and External Relations Division, it looks at women's education, the rush of migrants from countryside to city, and environmental refugees, of whom there could be as many as 400 million by 2020. It was shot on location in Costa Rica and Indonesia, and uses stock footage from other countries.

Screenings are being organized in various countries. For more information, contact your local UNFPA or United Nations Development Programme office or UN Information Centre.

Uganda Policy

Work has begun on drafting a population policy for Uganda, UNFPA Country Director Teferi Seyoum reports from Kampala. A 12-member committee in April began sifting through and analyzing demographic, economic, and sociological data to come up with planning goals for use in drafting a national population policy. The committee members come from various government ministries, academic institutions, and family planning organizations.

Balancing act

With our future in the balance, we need to tip the scales to favour sustainable development, says *The State of World Population 1992.*

Planet Earth's resources are adequate for its inhabitants to enjoy sustained development, if these resources are carefully used, according to "A world in balance," this year's State of World Population report from UNFPA.

"The requirements will be to improve conditions for the world's 1.1 billion poorest people; to meet the legitimate aspirations of the three billion who are neither rich nor very poor; to cut the environmental cost of development and distribute its benefits more equitably," says the report.

"Progress towards these goals calls among other things for slower population growth, smaller overall totals, and more balanced population distribution, within and between countries," it adds.

Bolstered with the latest United Nations long-range population projections, the report warns that delaying action to reduce family size during the next decade "could make a difference of up to four billion to the size of the world's population in 2050—equal to the whole of world population in 1975."

There are some 5.48 billion of us in the world, according to the latest UN figures. In 1998, we will number 6 billion. Annual additions to world population in the next decade will average 97 million, "the highest in history," the report says. Nearly all of this population growth will be in Africa, Asia, and Latin America. Over half will be in Africa and South Asia.

The UN's predictions considered most likely show world population nearly doubling to 10 billion in 2050 and levelling off at around 11.6 billion in 2150. But growth could throw off these expectations, reaching 12.5 billion in 2050 and heading towards 20.7 billion a century later.

In the absence of a dramatic redistribution of wealth and resources, the report sees worsening ecological, economic, and social problems as the inevitable consequence of these trends.

Already, as many as 70 million people, mostly from developing countries, are working, legally or illegally, in other countries. More than one million people emigrate permanently to other countries; about as many seek asylum each year. Migration has created tensions in many parts of the world; "current population trends will increase the pressures to migrate," the report says.

"The labour force in North America will not increase between now and 2025 except through immigration," it predicts. "In Central America it will increase by 50.5 million. Western Europe's labour force will fall by 14.5 million; North Africa's will increase by 56.6 million."

Population growth has had a major environmental impact, the report states: "In developing countries it is responsible for around 79 per cent of deforestation, 72 per cent of arable land expansion, and 69 per cent growth in livestock numbers."

Although most developing countries have improved living conditions for increasing proportions of their people, the numbers of the poor, the illiterate, and the malnourished have continued to climb, the report maintains.

Recent UN surveys suggest that the percentage of people in poverty in developing countries fell from 52 per cent in 1970 to 44 per cent in 1985. Yet because of population growth over this period the actual numbers of the very poor rose from 944 million to 1.156 billion—an additional 212 million people. The numbers increased in every region.

"However, countries which succeeded in slowing population growth saw the benefit in the 1980s," the report adds. During the 1980s, countries with slower population growth saw their average incomes per person grow 2.5 per cent a year faster than those with more rapid population growth. Countries with slower population growth also tended to have higher savings and investment ratios.

"Ending absolute poverty, improving health and education and raising the status of women will contribute to slower, more balanced population growth," according to the report, which calls for "a sustained and concerted programme, starting immediately."

The aim of this programme should be to bring future population growth towards the UN's lower population projection, 1.5-2 billion less than the medium, or most likely, and 4 billion less than the high projection by the year 2050. Special attention should go to Africa and South Asia, where more than half of the increase in population and the majority of the world's absolute poor are found.

Promoting and ensuring women's equal access to education should be a top priority, says the report, because it contributes to their personal development, to smaller families, and to better health for mothers and children.

The report says that experience in the last two decades has shown that fertility patterns can change in as little as a decade and that voluntary family planning policies and programmes can be highly effective in encouraging the change. "Ac-

Mark Edwards/Still Pictures

Home, jobless, and looking for work: migrant worker after the Gulf War.

cess to information and the means of deciding the size and spacing of the family has been accepted as a human right for over 20 years," it states. "Yet 300 million women in developing countries did not have ready access to safe and effective means of contraception in 1990." In these countries, according to the report, one in five births is unwanted.

Health crisis looms over Republics

The governments of the Commonwealth of Independent States (CIS) and the Baltic republics say improvements in their family planning programmes are urgently needed to stave off a looming health crisis, according to United Nations fact-finding missions to the former Soviet Union.

UN missions were sent to the eleven CIS republics and three Baltic states in February, in response to appeals for humanitarian assistance from these countries and after discussions within the international community. The missions were organized by the United Nations Children's Fund and the World Health Organization. Experts from the UN Development Programme, the World Food Programme, and UNFPA took part.

They found family incomes dwindling as production and real wages fell and prices continued to rise rapidly. Growing numbers of people are coming to depend increasingly on the state for social and health services at a time when public finance is being squeezed in the absence of new revenue-collecting systems.

Reliable contraception is in acutely short supply in these countries, says UNFPA's Erik Palstra. This accounts for some of the world's highest rates of induced abortions, particularly in the western republics, and high population growth rates in the other republics. According to data collected by the mission, it is common for Russian women to have six to eight abortions during their reproductive years. The short birth intervals and high fertility characteristic of most developing countries are common in the rural areas visited by the missions. Fertility is reasonably low in urban areas, but there is an almost total neglect of contraception and an almost complete reliance on induced abortion as a means of regulating fertility. Available data on current contraceptive prevalence suggest 30 per cent of couples practise contraception, but the overwhelming majority of these use more traditional, less reliable methods such as withdrawal and rhythm.

Governments are eager to strengthen family planning services to improve the health of mothers and children, a draft mission report states. This eagerness is formally stated, for example, in the Tashkent Appeal for Partnership, which was signed by the governments of Kazakhstan, Kyrgystan, Tajikstan, Turkmenistan, and Uzbekistan on 27 February 1992.

Government services normally include oral contraceptives, IUDs (intra-uterine devices), and condoms. However, concern among both service-providers and clients over the unavailability of low-dose oral pills, and the poor quality of locally produced condoms and IUDs, jeopardize family planning services.

Already, governments have requested emergency shipments of IUDs to replace defective, locally manufactured ones. The missions recommend that, beyond such emergency shipments, training workshops on reproductive health and family planning be held in each country and for the region as a whole. Workshops on Islam and family planning should also be held in the republics whose populations are predominantly Muslim.

According to the missions, demographic, health, and socio-cultural surveys are also needed in all countries, to provide information needed for national contraceptive policy-making, and to design and implement family planning services and information campaigns. Individual republics will need technical assistance in adopting the "cafeteria approach" to contraceptive services. This approach provides a wide choice of contraceptive methods to prospective users, and the information and counselling to help them choose or change their preferred method.

In the missions' view, helping to bring the quality of locally produced contraceptives up to international standards should be a priority for the international community. This would involve reviewing local production facilities, applied technology, and marketing options. The missions further counsel that since the CIS countries plan to privatize many of their public corporations, eventual joint ventures with the private sector should not be overlooked.

The cost of meeting these countries' most pressing reproductive health and family planning needs will amount to almost US$20 million in the first 18 months, according to a draft budget based on the missions' findings.

UNFPA/E Palstra

Quality contraceptives needed: Health centre/pharmacy on the outskirts of Bishkek, Kyrgystan.

UNFPA could assist, but only if external finances are made available. Says Palstra: "Donors can use UNFPA's technical capability in addressing the needs of the CIS republics and the Baltic states, provided that all financial resources are met."

UNFPA staffers Palstra and Elena Pozdorovkina took part in the missions.

Condom punctured?

The contraceptive sponge and the diaphragm provide more protection for women against some sexually transmitted diseases (STDs)than do condoms worn by male partners, according to a study published in the May issue of the *American Journal of Public Health*.

In the study, women who used sponges were 71 per cent less likely to have gonorrhea, 74 per cent less likely to have trichomoniasis, and 13 per cent less likely to have chlamydia than those who used no contraceptive.

For those who used diaphragms, the reduction in risk was 65 per cent for gonorrhea, 71 for trichomoniasis, and 72 per cent for chlamydia.

Among women whose partners used a condom, the figures were 34 per cent, 30 per cent, and 3 per cent, respectively.

Together, these STDs account for 75 per cent of the 12 million new cases of STDs in the United States each year. The lower incidence of chlamydia among sponge and diaphragm users was not considered significant because of the small number of women in the study who were diagnosed with the infection.

However, the study also found that women who used the diaphragm were more likely to have candidiasis, a vaginal yeast infection, than those who used no contraceptive; sponge and condom users were not at higher risk of this infection.

The retrospective study of 5,681 consecutive visits to a STD clinic in Denver by 4,162 women collected little information on the frequency, regularity, or way in which the contraceptives were used. Its authors defend their findings as based on complete information on participants' risk factors for STDs, such as number of partners, history of STDs, and young age.

"Because negotiating the use of a condom with a partner may be difficult, it is important for women to be educated about effective STD-prevention methods they can control—especially methods that can be purchased over the counter," says Michael Rosenberg, clinical associate professor of epidemiology and obstetrics/gynaecology at the University of North Carolina at Chapel Hill and the study's principal author.

STD-causing organisms are more easily transmitted from men to women than from women to men, he says, and the consequences for women are far more severe. A woman can be infected with chlamydia, gonorrhea, or both without experiencing any symptoms, so she can harbour these infections unknowingly while they cause irreparable damage to her reproductive tract. For example, pelvic inflammatory disease, a common complication of both infections, can fester without symptoms and eventually result in infertility, ectopic pregnancy, and death.

Simplifying the Pill

The United States Food and Drug Administration (FDA) is introducing new, simplified and standardized instructions for oral contraceptive pills.

The instruction sheets, which manufacturers will be required to insert in every package of their pills, are written in language designed for sixth grade-level readers to understand. They replace instructions which vary between the more than 50 individual brands of pills currently available in the United States.

New brands of pills will not be approved by the FDA unless they include the new instructions; existing brands will be required to include them in the future.

At least 250,000 women become pregnant each year in the US because they used their pills incorrectly, according to the National Academy of Sciences. FDA sources blame some of these unplanned pregnancies on confusion caused by the differing, sometimes complex instructions provided by manufacturers. Some 10.7 million American women depend on the pill to prevent pregnancy.

Existing package inserts differ, for example, in telling women when to start taking their pills: on the first Sunday after menstruation begins, on the first day of menstruation, or on the fifth day. The new FDA instructions narrow the choice to two options: either the first day of menstruation or the following Sunday. If a woman starts taking the pill during the first 24 hours of menstruation, the new instructions say no back-up contraceptive method is needed. If a woman chooses to start on the first Sunday after her period begins, they recommend she use another method for seven days.

The instructions also cover what to do when a woman misses a daily pill: "Take 2 pills on the day you remember and 2 pills the next day. Then take 1 pill a day until you finish the pack," they say, adding that a woman must use a back-up contraceptive method for seven days after the missed pills.

The new instructions apply to so-called combination pills, those that combine estrogen and progestin. They will not apply to progestin-only "mini-pills," instructions for which are reportedly pending revision.

Cameroon: Employers get hip

Employers in Cameroon increasingly support efforts to promote family planning among workers, IEC (information, education and communication) expert Foussenou Sissoko reports from Yaounde.

Since 1988, the national workers' union, known by its French initials OSTC, has offered its members education in family life and responsible parenthood. Discussions and counselling sessions are conducted at the workplace by 120 OSTC instructors, and involve the union's 400,000 active members, management, and occupational health services at 23 enterprises. By late last year, 14 factory nurses who had been trained in family life education techniques were scheduled to start clinical training in modern contraception.

Sissoko, who works on the programme,

explains the emphasis on responsible parenthood: "In Cameroon, family planning is equated with the concept of responsible parenthood. This means that people—in this case, the workers—must be aware of their responsibilities in taking the decision to create life."

The OSTC programme is supported by the Ministries of Labour and Social Insurance, Public Health and Social and Women's Affairs, the International Labour Organisation, and UNFPA. Sissoko says it is the first such programme financed by the Fund in French-speaking sub-Saharan Africa.

Employers "were not slow to understand the scope of the OSTC education programme," says Sissoko. "They too have benefited from the information campaigns on family life and responsible parenthood, and have gained insight into the relationship between the social well-being of the workforce and its productivity."

Pakistan: Reproductive rights rising

Long kept submerged by patriarchy, the issue of reproductive rights is surfacing in the choppy waters of debate on women's rights in Pakistan. This, according to Khawar Mumtaz, co-ordinator of the women's resource centre, *Shirkat Gah* (which means "place of participation").

For the first time in a quarter-century, the South Asian Islamic republic's leadership is publicly committed to promoting family planning. Its logic is simple: without effective family planning to slow population growth, the country stands no chance of meeting its citizens' basic needs—health, shelter, schooling, and jobs.

The policy shift is welcomed by many women's organizations, who have long criticized governments for lacking the political will and administrative discipline to provide needed family planning services. But they say there is more at stake than slower population growth:

UNFPA/A Aslam

Resisting state control: Khawar Mumtaz.

there is women's health, and a woman's right to protection under the law.

The Women's Action Forum, an activists' umbrella group that made its name by leading the political opposition to the government of the late Gen. Mohammed Zia ul-Haq, has taken up the fight for the right to legal abortions in rape cases.

Abortions are illegal in Pakistan, but are widely thought to be quite common. Mumtaz recalls the case of a domestic servant who sought to end her seventh pregnancy with an abortion done by an untrained *dai*, or traditional birth attendant. "She almost died, yet even after this her husband was still reluctant to permit her to have a tubal ligation," Mumtaz says, adding that the story is typical in Pakistan, where men expect their women to shoulder the responsibility for family planning, but balk at giving them the authority to limit their fertility.

This latest campaign is part of a concerted and comprehensive resistance to increasing state control over women's lives since the late 1970s. In her view, the resistance to male domination in domestic, social, cultural, economic, and political life, has put women's issues at the centre of political debate.

"The government now says it wants women's participation [in economic and social development]," she says. "Our position is, they've been participating, and they now need to be recognized and acknowledged."

As an example of how women's contributions to Pakistan's economy and society are ignored, she points to one official statistic considered spurious by many analysts: that 90 per cent of Pakistan's women are dependent.

Nonsense, she says: "The data don't acknowledge that many women contribute to the family, because most women earn their money in the informal sector. These earnings don't show, and the women are officially defined as housewives not seeking employment."

She cites a recent World Bank study suggesting that 25 per cent of Pakistan's low-income households are headed by females—a figure close to the international norm of 33-35 per cent. She points to neighbouring India and to Indonesia, where census takers and government statisticians have tried to take account of women's work in the informal sector. "These, and other countries have redefined work," she says. "Now we need to."

And she recalls trying to find women who didn't work for cash, during a study of households in peri-urban settlements. "When we asked them where we could find women who did not work, they asked us, 'Do you mean there are women who don't work for money?'"

-Abid Aslam

Gambians drafting policy

The government of Gambia is formulating a population policy emphasizing the need to strengthen family planning services in order to improve the health of women and children and the country's economic prospects, UNFPA medical adviser Tengio Urrio reports from Banjul.

Gambia has one of the smallest national populations in sub-Saharan Africa: less than a million people in 1990, according to the United Nations. Its population is thought by the UN to be growing at an annual rate of 2.7 per cent.

The country's women and children are disadvantaged, despite efforts to improve nutrition and health care, and despite an expanded

programme of immunization that boasted higher coverage figures in the early 1980s than many countries could claim at the end of that decade. United Nations figures suggest some 132 babies in every thousand die before their first birthday, as compared to an average of 102 for the rest of West Africa. According to a World Health Organization report, 1,500 women died from causes related to pregnancy and childbirth for every 100,000 live births in 1984, as compared to 600 maternal deaths for every 100,000 live births in neighbouring Senegal.

Advances have been made in community-based contraceptive distribution and in data gathering, analysis, and use by health and planning officials, says Urrio. The government is committed to halving maternal mortality while doubling the proportion of women who use contraceptives in 260 villages with special primary health care programmes. It is setting up "Maternity Waiting Homes" as part of an effort to spot women with high-risk pregnancies, enable them to start receiving care before delivery, and monitor their progress after childbirth. Family planning programmers also hope to expand the variety of contraceptives from which Gambians can choose, and to improve the quality of services.

The government is reportedly talking to non-governmental organizations as well as the traditional sources of assistance—governments and international agencies—to raise the necessary funds.

UNEP/Ted Rowe

No quick fixes.

Science and technology not enough

"If current predictions of population growth prove accurate and patterns of human activity on the planet remain unchanged, science and technology may not be able to prevent either irreversible degradation of the environment or continued poverty for much of the world." This, according to *Population Growth, Resource Consumption, and a Sustainable World*, a joint statement issued by the Royal Society of London and the U.S. National Academy of Sciences.

This is reportedly the first time the two scientific academies have issued a joint statement, reflecting, they say, joint "deep concern" over the future of Earth. It "also reflects the shared view that sustainable development implies a future in which life is improved worldwide through economic development, where local environments and the biosphere are protected, and science is mobilized to create new opportunities for human progress." It calls for an inter-academy conference, likely to be held in Sweden next year.

The academies put population growth squarely at the centre of their attention: "Each additional human being requires natural resources for sustenance, each produces by-products that become part of the ecosystem, and each pursues economic and other activities that affect the natural world. While the impact of population growth varies from place to place and from one environmental domain to another, the overall pace of environmental changes has unquestionably been accelerated by the recent expansion of the human population."

They also call for "new generations of safe, easy to use, and effective contraceptive[s]," explaining that "unlike many other steps that could be taken to reduce the rate of environmental changes, reductions in rates of population growth can be accomplished through voluntary measures. Surveys in the developing world repeatedly reveal large amounts of unwanted childbearing."

"By providing people with the means to control their own fertility, family planning programmes have major possibilities to reduce rates of population growth and hence to arrest environmental degradation," they add.

The academies urge this month's "Earth Summit" to acknowledge that population growth is as important a variable in the quest for a sustainable world society as human activity.

The statement, which reportedly took two years to write, uses United Nations population estimates and projections taken from the *State of World Population 1991* report from UNFPA. Notably, the United Nations mid-range projection suggests world population will rise from 5.4 billion in 1991 to 10 billion in 2050; some 95 per cent of this growth is in the developing countries, whose share of global population is projected to rise from 77 per cent in 1990 to 84 per cent in 2020. In these countries, "the rapidly growing population and the pressure to develop their economies are leading to substantial and increasing damage to the local environment."

Yet, the academies point out, "developed countries, with 85 per cent of the world's gross national product and 23 per cent of its population, account for the majority of mineral and fossil-fuel consumption. ... The prosperity and technology of the developed countries, however, give them the greater possibilities and the greater responsibility for addressing environmental problems."

If developing countries are "forced to deal

with their environmental and resource problems alone, they face overwhelming challenges. They generate only 15 per cent of the world's GNP [Gross National Product], and have a net cash outflow of tens of billions of dollars every year," the scientists state.

John Maddox of the London weekly *Nature* was among the first to review the statement. In his view, it "refers to most of the issues now conspicuous on the agenda of the environmentalists, some of which are controversial. But it stops short of seriously contentious questions, such as the policy of the US government on the provision of overseas aid linked with abortion and the position of the Roman Catholic Church."

The statement concludes with the warning that "science and technology alone are not enough. Global policies are urgently needed to promote more rapid economic development throughout the world, more environmentally benign patterns of human activity, and a more rapid stabilization of world population."

Nigeria census: All present and accounted for?

Nigerians and international observers alike are assessing the significance of provisional results of last November's census. The numbers, released in March, suggest there are some 20-30 million Nigerians fewer than estimated by the United Nations, World Bank, and various government departments.

Reaction is mixed. According to the local press, Yoruba chiefs, whose constituencies have shrunk statistically, and opposition politicians dismiss the results as unreliable. The government and its supporters defend the head-count as the most thorough and scientific one the country has ever seen. UN observers concur, pointing out that the preliminary results are consistent with the findings of pre-census surveys and a trial census. However, they add that the key word is "provisional"; that conclusions cannot be drawn until the raw figures have been checked against field investigations and analyzed. A final census report is expected some time next year.

According to the provisional results:

- there are some 88.51 million Nigerians;
- 35 million of the total are adults, as opposed to the 50 million registered to vote in impending elections (some 20 million false names had already been struck off the electoral rolls before the census, the local press reports);
- the country's northern, mainly Muslim states have the largest populations, despite years of civil war and migration to the south and to neighbouring countries, and although most of the country's economic activity and largest urban centres are along the south coast and fertile delta region; and
- Nigerian men outnumber Nigerian women, contrary to the international norm.

Despite the lower-than-expected total Nigeria remains Africa's most populous country.

A ticklish business

Census-taking has long been a ticklish business in Nigeria, where three main religious groups, four main ethnic groups, and more than 160 linguistic groups vie for representation and government services.

The results of censuses in 1962—held between becoming a dominion in 1960 and forming an independent republic in 1963—and 1973 were sucked down in political maelstroms. Despite challenges, the findings of the 1963 census were upheld on appeal by the Supreme Court of Nigeria.

Demographers are turning to the results of the 1963 head-count, on which projections for Nigeria's population were based, for possible explanations of last year's national tally. If both 1963 and 1991 totals were accurate, the country's population has been expanding at an annual rate of about 2.1 per cent, not the 3.3 per cent per year assumed by UN and national demographers. It is more likely that the results of the 1963 census were inflated, government and UN experts say.

Aderanti Adepoju, a professor of demography at the University of Ife, says the 1963 figures were made official because they were politically acceptable; demographers, however, considered them unreliable. In addition, he points out that most projections assumed constant rates of population growth and failed to take account of the country's oil boom and a civil war.

Political transition

With Nigeria's transition from military to civilian administration in the balance, both critics and defenders of the census urge further investigation. In a newspaper editorial, presidential aspirant Frederick Fasehun blasts the results as a "white-wash of reality," and recommends "that for a period of five years, starting from June 1, 1992, all our local government areas should religiously register births, deaths and marriages to enable us to confirm these provisional results."

Ajibola Ogunshola, chair of Punch newspapers, defends the head-count as "the most thorough of all the published censuses that we have had so far." He suggests that if any local government has "strong reasons to believe that the figure of another local government is too high, it should feel free to conduct its own detailed investigations into it. This should not be too difficult to do since the National Population Commission has maps of each of the over 210,000 enumeration areas into which the country was divided."

Meanwhile, Ebenezer Kuteyi, director of the Department of Population Activities at the Federal Ministry of Health and Human Resources was quoted by local newspapers as saying the provisional results do not call for a reorienation of the government's population policy.

Nigeria promulgated its population policy in 1988. It sets targets for fertility reduction, age at first marriage, and access to health care, within which family planning services are prominent.

Small, Beautiful, and Sustainable

by Don Hinrichsen

"Gandhi was right when he said that what India needs more than anything else is appropriate technological development," says Ashok Khosla, president of Development Alternatives, a Delhi-based non-governmental organization (NGO) specialized in sustainable development. "Unfortunately, the economics of small-scale appropriate technology has been lost in India's rush towards development, Western style."

In a country bound up with serious resource constraints, Dr. Khosla says it makes little sense to follow the Western prescription for economic development, which was based largely on access to unlimited timber, water, minerals, and other natural resources. India, like many developing countries, is already pushing the "red line" of resource use. "Increasingly we are faced with a growth of limits, not limits to growth," he says, paraphrasing ecologist Norman Myers.

There seems little doubt that India's limits are growing. By the beginning of 1990, the country had less than 14 per cent forest cover, far below the government's target of 25 per cent. Land degradation was reducing crop yields across one million square kilometres. In many areas, water and fuelwood are in short supply.

India's population growth rate of 2.1 per cent per year adds an additional 13.6 million people to the country's huge population base every year. Population growth, rapid urbanization, widespread poverty and poor resource management have combined to reduce India's capacity to provide basic infrastructure and services to its 860 million people, eroding the country's potential for future economic growth.

Development Alternatives, or DA, prides itself at overcoming resource limits. Its headquarters building, situated on a quiet, tree-lined plot on the edge of New Delhi, is a model of appropriate technology and efficient resource use. Looking somewhat like an elaborate adobe dwelling with domes and arches, it was built entirely of a new type of brick made from sand and clay. The novelty is in the composition of the bricks: they consist of only 20 per cent clay, as compared with 90 per cent in normal construction bricks and breeze[1] blocks. Furthermore, these bricks don't need to be fired in a kiln to be hardened; they are compressed under high pressure using a machine invented by DA. The process saves precious fuelwood, which often has to be brought to Delhi by rail from as far as 700 kilometres away, and reduces the amount of land torn apart by clay diggers.

The "magic bricks," as they are sometimes called, have one more advantage over their conventional counterparts — they make buildings "heat proof." Even in the searing heat of May, when Delhi bakes under a merciless sun and temperatures seldom drop below 40 degrees centigrade, DA's employees don't have to resort to expensive air conditioning.

Engine of development: the Mayan village women's weaving collective

Set up in the early 1980s, DA has a unique organizational structure for a developing-country NGO. It is run like a regular business, and is built up around three primary networks:

- The Innovative Network identifies, generates, develops and designs environmentally sound and socially appropriate technologies, products, services, and systems;
- the Production Network manufactures, assembles, and packages the products; and
- the Marketing Network sells the products, provides after-sales service, and feeds back marketing information to the Innovative Network.

Much of DA's research and development is aimed at people forgotten by mainstream development or displaced by environmental collapse. "Our first concern is the rehabilitation of people," says Khosla.

Don Hinrichsen is a London based writer and consultant specializing in environment and population issues. His two recent books are Our Common Seas: Coasts in Crisis and The WWF Atlas of the Environment.

"We concentrate our activities on the urban and rural poor, people who are often overlooked or ignored by government programmes."

Khosla and his crew have learned that the environment is easier to rehabilitate when people are given sustainable livelihoods. DA has demonstrated this in the village of Datia near Jhansi, in central India. Here, villagers rehabilitated an abandoned wasteland. After the site was cleared, the entire area was converted to tree plantations. Villagers planted *neem*, *ipil ipil*, teak, and bamboo. The native *neem* and fast-growing *ipil ipil* trees are harvested for fuelwood and fodder, and used to make charcoal, briquettes, and biogas. They also add nitrogen to the soil, helping to ensure that yields will not drop. Teak and bamboo are felled to make furniture and baskets, and the logging waste is used to generate both wood-gas and biogas.

"I am no longer at the mercy of my husband."

"This is an example of how local initiative can be harnessed not only to reclaim a wasteland, but to provide sustainable income-generating activities for an entire village," observes Khosla. "They are converting biomass to useful, value-added products, and managing the environment in the process." Value-added products include furniture. They are the outcome of local manufacturing, and as such contribute more to the local economy than do raw-material exports.

DA has been particularly successful at launching income generating activities for poor rural communities. At the tiny village of Mayan on the edge of the Rajasthan Desert, Dr. Sandhya Chatterji, head of DA's women's unit, has set up a women's weaving collective, using hand looms developed by DA technicians. The output of these sophisticated looms is comparable to that of power looms, but at a fraction of the cost.

To date, the project employs 26 village women full time, 12 of them as weavers and the others as administrative and support staff. There are two permanent posts: a master weaver and a production manager, both from the village. Another 10 women get part-time work.

Around 15-20 per cent of what they produce is sold locally, at prices reduced to accommodate lower incomes. The rest is exported to Delhi and other cities where DA's marketing arm sells it to local retailers. Although DA acts as a marketing intermediary, it takes no money for its franchising work. All profits are ploughed back into the projects.

"This particular weaving collective has been a catalyst for our R&D [Research and Development] work with the hand looms," says Dr. Chatterji. "These women tested out the first looms when the [Mayan] project started in 1988 and helped our technicians improve on the initial designs. They are now using the fourth generation loom, one they helped perfect."

The looms can each produce up to 20 metres of cloth a day and

D. Hinrichsen

Old habits. The Mayan weavers no longer cover their faces when strangers are present.

the women earn between 800 and 850 rupees per month, a higher than average wage, particularly for this depressed part of the country where most of the men are unemployed day labourers. With a number of village women bringing home real income, their status within the family and the community has improved considerably.

"When the project first started," Dr. Chatterji recalls, "most of these women were wary of outsiders and afraid to participate in the project. Generally, they had a low opinion of themselves." Today, they show self-confidence and humour as they work the looms. They no longer cover their faces when strangers visit the factory.

Employment has dramatically changed the lives of Mayan's working women. For one thing, it has given them some decision-making authority over their own lives. Sunita, an unmarried 18-year-old, has finished secondary school and is saving her money for further education; something that would have been impossible before the project. As it is, she has more schooling than anyone else in the collective.

Santosh, a mother of two married to a long-distance lorry driver, recently decided to have a tubectomy. She uses her money to improve her domestic life, buying a pressure cooker and other household appliances and depositing what is left in the bank.

For Bharpai, who has five children and a husband who drinks up his own meagre wages as a seasonal agricultural labourer, her

steady income allows her to run the household. She is now better able to feed, clothe, and educate her children. More importantly, "I am no longer at the mercy of my husband," she says with a grin.

The project has had several important spin-offs for the village. Literacy has improved considerably, especially for the women, and they are now practising family planning. Birth rates for Mayan are falling steadily as more women follow Santosh's example and have tubectomies. "I don't want any more children," Santosh affirms. "We can't really afford more, and I want my two children to have better opportunities in the future."

As for the future, staff at DA say they hope to spark village-level development all over the country, using examples like Mayan and Datia to attract more investment and government support. Already, the Haryana state government wants DA to duplicate the Mayan experience in other low-income areas. Dr. Chatterji is cautious. "The authorities want us to take on large- scale projects," she explains. "But our success is based on careful planning and training, aimed at improving the income generating potential of poor villages. It can't just be up-scaled and made to work."

What Development Alternatives can do, staff say, is more of the same: demonstrating that local initiative can be harnessed to build sustainable economic development. It is a viable alternative for poor rural areas of India, neglected by big development, and one that is beginning to receive serious attention.

D. Hinrichsen

Dr. Khosla and his "magic bricks."

Jamaica: Hard Times, New Options

by Yvonne Crawford

From its independence in 1962 until the early 1970s, Jamaica enjoyed steady economic growth. Gross Domestic Product (GDP) grew at an average rate of 5 per cent a year until 1973, according to the World Bank. This steady growth helped to underwrite public-sector investments in hospitals, public health initiatives, and schools that became the envy of the Caribbean and gave the country a well-educated and healthy workforce.

Since 1973, Jamaicans have seen their quality of life eroded by what the World Bank terms "sustained [economic] contraction resulting from external shocks and domestic policies." By 1986, real public sector spending on education was 25 per cent less than in 1981; spending on health was 35 per cent less.

The local consequences of international recession are forcing Jamaican family planning personnel to explore various options to sustain and augment a national family planning programme that succeeded in lowering total fertility from 6 children per woman in the 1960s to 2.9 children in 1989, and that aims to raise contraceptive prevalence from 55 per cent of women in union in 1989 to 63 per cent in order to ensure the national goals of replacement-level fertility of 2.1 children per woman and a population of just under 3 million, up from 2.4 million now, by the year 2000.

One such option may be greater collaboration with the private sector.

Already, a handful of private companies are involved in family life activities throughout the country, independent of government. One such company is CMP Consumer Products, makers of the Libresse® sanitary napkin.

Needed education, savvy marketing

CMP has a schools programme now in its seventeenth year of operation. The programme, which combines education about the biological and social changes schoolgirls go through with some savvy marketing, now covers some 200 schools nationwide.

The programme is divided into two components: one for junior schools, the other for senior schools. The junior school programme is designed to assist girls in the pre-menstrual and menstrual phases of development, generally aged 11 to 13 years, to gain a basic understanding about menstruation and menstrual hygiene.

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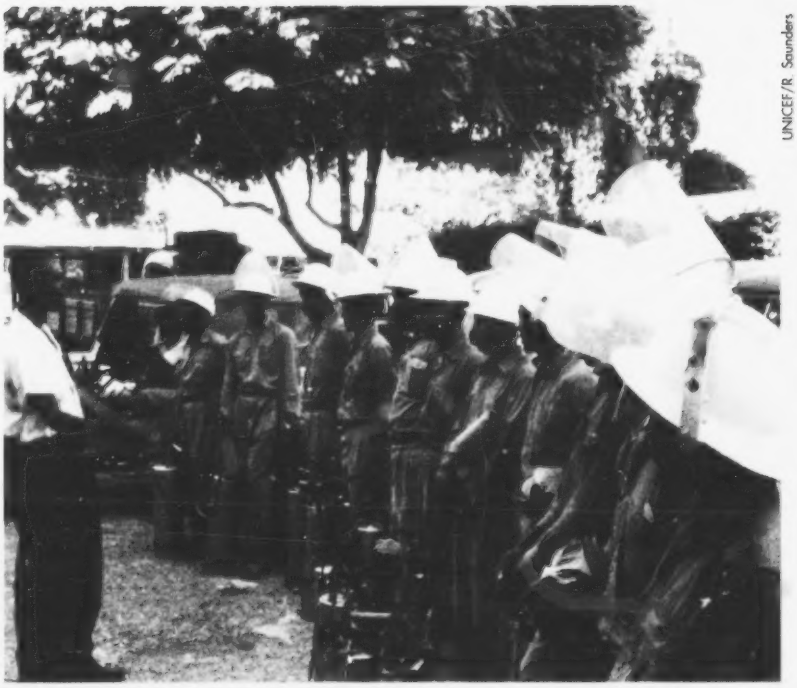
A typical visit to a school involves a discussion during which schoolgirls and educators exchange questions and answers. Diagrams and pamphlets are sometimes accompanied by a short film on hygiene.

Despite changes in schools' curricula and the introduction of audio-visual teaching aids over the years, girls in this age group are generally not very clear on how their bodies work, according to Sharon Boyne, CMP's Libresse brand manager. She says this is mainly because many schools have no guidance counsellor, and because it is not mandatory for schools to have family life education on the curriculum, although there is talk in official circles of making it so.

The senior school programme aims at providing older girls with information on personal health and common feminine problems. The programme consists of two parts: First, schoolgirls participate in talks and discussions on common women's health issues, ranging from urinary tract infection to pelvic inflammatory disease, to toxic shock syndrome. A film on sexually transmitted diseases (STDs) is also shown. Second, their schools are provided with disposal bins for sanitary napkins, and professionally designed posters on pregnancy and menstruation.



UNICEF/R. Saunders

In the days of boom, Jamaica's public health successes included malaria eradication.

At each visit, sample packs containing two Libresse sanitary napkins are given to each student. Libresse is also made available to schools at a preferential rate.

Although CMP's schools programme is aimed at girls, at co-educational schools, boys are always welcome to attend discussions or to seek advice.

CMP has designed a line of pamphlets for schoolgirls. These include *Every Woman Should Know*, which provides information on pre-menstrual symptoms, vaginal discharges, toxic shock syndrome, urinary tract infections, and STDs such as gonorrhea, genital herpes, and syphilis, and AIDS. Another pamphlet, *You're a Big Girl Now*, covers the same topics but is intended for the pre-menstrual group.

The Chapters of *Now That You're A Woman* include "Let's talk about adolescence", "What is menstruation and why does it happen?", "How long will your period last? How often should you expect it?", and "What to do when your period comes." The booklet also provides a glossary of terms.

Posters distributed by CMP include "Hormones in the menstrual cycle" and "The beginnings of human life," each of which comes with a teacher's guide for classroom discussion.

One film used in the CMP programme is *Dear Diary*, which tells the story of Jamie, a girl who has her first period. Jamie's mother, visibly embarrassed, tells Jamie a very archaic and prudish story her own mother once told her. Still in the dark about what's going on with her body, Jamie passes a note to a friend in class, asking if she can participate in track and field sports if she is having a period. The note is intercepted by the male science teacher, who gives the whole class a detailed scientific explanation about puberty.

Jamie's adventures in self-discovery include a visit to a bookstore with her mother, during which she buys a book on puberty. This scene serves to contrast differences in attitude between mother and daughter—the youngster actively seeking knowledge about herself. Jamie learns that she can, in fact, participate in school sports. Then one day, she forgets her diary in class and is horrified to learn that all her classmates have read it. But her embarrassment soon gives way to the realization that all her peers share her concerns and questions.

Educators and participants say such films help adolescents to understand that the changes their bodies are facing or already going through are normal.

CMP was among a number of private-sector co-sponsors of Jamaica's first-ever Safe Sex Week, 10-14 February 1992. Organized by the National Family Planning Board, the Ministry of Health Epidemiology Unit's National HIV/STD Control Programme, and the Association for the Control of Sexually Transmitted Diseases with support from UNFPA, the week was designed to foster an awareness of safe sex. Experts view proper personal hygiene as a primary link in the chain of healthy sexual lifestyles.

Safe sex and good reproductive health knowledge and care are widely viewed as essential if Jamaica is to sustain a tolerable rate of population growth and reduce the risk of infection with the AIDS-causing human immunodeficiency virus (HIV) and other STDs. As programmers become acutely aware that there are limits to the public sector and international funding on which programmes have traditionally relied, they are starting to eye the possibility of expanding on examples such as CMP's schools programme and the private sector's role in Safe Sex Week. But as some programmers point out, bureaucrats and business people will need to establish the right balance between public policy and the profit motive if they are to enjoy a lasting relationship.

ENVIRONMENT, RESOURCES, POPULATION:

The Three Great Problems

by Henry W. Kendall

Human activities now threaten biological and geophysical systems that all life depends on for food, energy, and a tolerable environment. These activities, if carried on unchecked, will put at serious risk the future that we wish for ourselves and for future generations. They may well leave the world unable to sustain life in the manner that we know.

The destruction of our environment and resources cannot be stemmed unless the growth of the world's population is stemmed. This growth is putting demands on resources and pressures on the environment that will overwhelm any efforts to achieve a sustainable future. Population growth rates, while declining, are still too large to allow adequate protection for our environment. The United Nations has concluded that the world population could reach 14 billion, a near tripling of today's numbers. Yet today one person in five lives in absolute poverty and does not get enough to eat, while one in ten suffers serious malnutrition. The obstacle posed by population growth is well appreciated by knowledgeable people although it is not yet fully understood by the world at large.

Jorgen Schytte

Bangladesh cattle market: Animal husbandry impoverishes the soil.

Critical Stress

The environment and essential resources are being critically stressed:

- Stratospheric ozone depletion is leading to ultra-violet levels against which much of the natural world has little protection; air pollution near ground level, including acid precipitation, is causing widespread injury to humans, forests and crops.
- We are exploiting and contaminating depletable ground water supplies heedlessly; heavy pressure on the world's surface waters has become a serious concern.
- Agricultural and animal husbandry practices are leading to soil impoverishment, loss of soil productivity, and extensive abandonment; per capita food production in many nations is now decreasing.
- Tropical rain forests, as well as tropical and temperate dry forests, are being destroyed rapidly with the concurrent loss of large numbers of plant and animal species. This irreversible loss—which may approach one third of all species now living by the year 2100—is an especially serious concern. Forms of life that contribute to the astonishing beauty of Earth are disappearing, and with them the potential for medicinal and other products they might provide, along with much of the genetic diversity that gives robustness to the world's biological systems.
- Pressure on marine fisheries from over-exploitation is increasingly severe. Oceanic regions near the coasts, which produce most of the world's food fish, are being injured by pollution from soil erosion, as well as industrial, municipal, agricultural, and livestock waste.

Much of the damage is permanent or irreversible on a scale of centuries. Other processes appear to pose important threats in the years ahead: Carbon dioxide and other gasses released by human activity into the atmosphere have the potential to alter climate on a global scale. While the predictions of coming warming are still uncertain, the possible risks are very great. Our massive tampering with the world's interdependent web of life could trigger widespread adverse effects, including unpredictable collapses of biosystems that we depend on.

Uncertainty over these possibilities is no excuse for complacency or delay in moving to abate them.

Present patterns of economic development, in both industrialized and developing countries, with the environmental and resource

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damage they now bring, cannot be sustained because limits on the capacities of vital global systems will soon be reached. When this occurs, there is great risk that some will be damaged beyond repair and trigger catastrophe that would sweep all into its fold. No more than one or a few decades remain before the chance to control the prospect we now confront will be lost and the prospects for humanity immeasurably diminished.

Great Changes

Great changes, effected very promptly, are now required if vast human misery is to be avoided and our global home is not to be irretrievably mutilated:

1. Environmentally damaging activities must be brought under control to restore and protect the integrity of Earth's systems we depend on.

2. We must greatly improve the management of resources crucial to human welfare, including more efficient and frugal use of those in short supply.

3. All nations must recognize that improving social and economic well-being, coupled with effective family planning programmes, are at the root of voluntary, successful fertility declines and population stabilization. Reduction of poverty, pervasive in the third world, including improvements in the status of women—who have a vital role in development—are irreplaceable needs.

Present patterns of economic development cannot be sustained because limits on the capacities of vital global systems will soon be reached.

A great diminution of the violence and war that characterizes our world is necessary. Much of the resources devoted to the preparation and conduct of war—now amounting to over US$1 trillion annually—are needed for the new constructive tasks.

The industrialized countries must greatly reduce their own overconsumption, their own pressures on resources and on the global environment—they are the world's worst polluters—and they must also aid and support developing countries. These are not disinterested responsibilities or altruistic acts. Earth's systems sustain us all and wealthy nations cannot escape if these are hurt.

Developing countries must realize that environmental damage is one of the gravest threats they face and that their attempts to blunt this damage will be overwhelmed as long as population growth remains unchecked. The greatest peril is to become trapped in a spiral of environmental decline, poverty, and unrest that can culminate in social, economic, and environmental collapse.

Kosin Bin Mazung

Fresh water. How much more where it came from?

Social and economic well-being, coupled with family planning, are at the root of voluntary, successful fertility declines and population stabilization.

Industrialized countries—the world's worst polluters—must reduce their overconsumption and aid developing countries. Earth's systems sustain us all and wealthy nations cannot escape if these are hurt.

For world population to stabilize without widespread starvation and disease, for example at double today's numbers, it will be necessary to roughly triple world food production, and triple or quadruple energy services, by the middle of the next century. Yet in the same period, fossil fuels must be phased out in favour of more benign, inexhaustible energy sources, environmentally destructive activities must be curtailed, and many damaged resources restored, especially agricultural productivity.

Science and technology will have very important roles to play in planning and implementing the changes. Yet it is a grave error to believe, as many appear to, that science and technology can provide a 'magic bullet' that will allow us to avoid the threats that face us all, let us continue on as we have been doing, and so evade the human problems at the root of the prospect we now face.

A new ethic is required and a new approach to the discharge of our duty to care for Earth and for ourselves. Yet adopting a new ethic and gaining the agreement of nations to move forward are themselves daunting tasks, for few peoples have been concerned about these matters. We must recognize the earth's limited capacity to provide for us, we must recognize its fragility, we must no longer allow it to be ravaged and hurt. Our generation now has this great responsibility; to fail would be a criminal act.

Our duty to care for Earth and for ourselves. Fighting the desert, Mauritania

Are babies made at macro-level?

by T. Scarlett Epstein

Last December, former World Bank President Robert McNamara proposed a six-point action plan for a massive global effort to slow population growth. The six points, delivered during the third Rafael M. Salas Memorial Lecture, were: national population goals; plans to meet these goals; international funding organized by the World Bank; global monitoring by UNFPA; annual ministerial-level meetings of the United Nations Economic and Social Council; and a population commission to help prepare for the 1994 International Conference on Population and Development.

All this gives the impression that national and international agencies can control fertility levels. It makes one wonder whether babies are made at macro-level.

Of course we all know that individual couples produce children and that they have to be convinced to reduce the number of offspring they have. The crux of the problem is that we still do not know what will induce the large majority in developing countries to have fewer children. National and international agencies concerned with population growth are still too remote from the grass roots to know the answer to this vital question. This is illustrated by the fact that the UN's "'most likely' estimate for 2025 has been revised upwards by 38 million to 8.504 billion," and that "projections of a 'stable' total of 10.2 billion—or only about twice today's population—by 2085 may have been too optimistic," according to UNFPA's *The State of World Population 1991*. For the foreseeable future, 95 per cent of this growth is expected to take place in developing countries.

This large projected population increase has to be seen against at least 30 years of concerted national and international efforts to reduce fertility rates. Of course it must be said that, as a result of family planning efforts, "about 51 per cent of couples [in developing countries] regularly use some means of contraception," as the UNFPA report points out. However, this also indicates that about half the couples in developing countries do not yet practise family planning and in many countries the percentage is a lot lower; by the report's calculations, for example, "only 27 per cent of Kenya's married women use contraception."

Available reports show that many of the couples who currently use contraception are educated, live in urban areas, and belong to higher income groups. By contrast, most of the remaining 49 per cent who do not yet use family planning lack education, live in rural settings, and belong to the poorest strata. The circumstances in which they live differ considerably from those of their urban counterparts. It therefore is wrong to assume that this category of people can be reached using the same approach as has been successful up to now. The World Fertility Surveys and the many KAP ("Knowledge, Attitudes, and Practices") surveys that have been conducted so far in developing countries relied almost entirely on questionnaire methods which, without being complemented by culturally-adapted qualitative enquiries, can never be expected to produce a full picture of the problems investigated. Thus there is still too little reliable information available on the fertility aspirations of those who do not yet use contraceptives.

T. Scarlett Epstein, a retired research professor from the University of Sussex, England, heads the International Committee for Development Market Research, a non-governmental organization.

Find out what the people want

While it is routine for successful businesses to conduct market research among specifically sampled populations before investing money in new ventures, development programmes pay too little attention to this obvious necessity. To improve the chances of national and international agencies reducing the rate of population growth in developing countries, population policies have to become client-led. This means family planning and the social marketing of contraceptives has to be guided by the results of development market research which reveals, among other things, the conditions under which non-contraceptive users will be prepared to become family planning acceptors, what type of contraceptive they want, what services appeal to them, and why.

As the International Planned Parenthood Federation put it in a 1991 seminar report: "Market research of family planning clientele should be an ongoing effort; as the programme environment is not static, neither is the clientele for family planning. Therefore, demand and needs must be continuously investigated. In the first instance, market research may be done most effectively by engaging the services of a specialized agency. However, in the long run it is likely to be more cost-effective to use in-house services. This may require the training of a small cadre of FPA [family planning association] staff to conduct such research periodically."

A cost-effective and reliable development market research of attitudes to the child-bearing behaviour and fertility aspirations of those who do not yet use family planning constitutes a necessary pre-condition for launching a successful social marketing campaign of contraceptives. Such social marketing—which has already been used in the context of family planning for example by The Futures Group in a number of developing countries—involves the application of consumer goods marketing techniques such as advertising and brand name development, to socially relevant and desirable goods and services. After all, Coca Cola and other commercial items have managed to reach the most remote societies; why can't family planning succeed likewise?

Babies are not made in the panelled offices of international agencies or national ministries, but in the minds and bodies of ordinary people living their everyday lives. Before we "design" family planning programmes, we have to find out what those people want.

A gender agenda

by Bience Gawanas

Women fought shoulder-to-shoulder with men to free Namibia from *apartheid*. Indeed, the woman freedom fighter became an enduring image of the liberation movement, for the world as much as for Namibians. Independence, which was declared on 21 March 1990, had been the common aim of women and men alike.

But for women, national independence was only the gateway to their continuing campaign for emancipation. During the struggle for national liberation, they were able to become soldiers, mechanics, doctors and lawyers, or even senior officials in political parties. As their participation in the independence movement deepened they came to see that in addition to having been oppressed as members of the black majority and as workers, they faced daily oppression as women.

Nevertheless, Namibian women knew their agenda in a new country would involve priorities more basic than those of Western "feminists": food, shelter, water, and jobs. The important thing was, and is, that they would have a chance to add their strengths, their talents, and, most significantly, their voices, to the process of creating the nation's political, economic, and social agenda. The formation last November of Nanawo, the Namibia National Women's Organization, was a step in this direction.

UN/J. Isaac

Celebrating independence, 1990. For Namibian women, the struggle continues.

Namibia needs all the resources it has and its women are a vast one. They make up more than half the population. A huge proportion of households (exact figures are not yet available) are headed by women, who bear all the responsibility for feeding, educating, and caring for their families.

To be effective agents of progress in the new Namibia, however, women must not merely be items on a national agenda shaped for them. They must be able to shape this agenda for women and for men, by drawing on their own perspectives and strengths.

They must unite behind, and advance, the belief that women's rights are human rights. In our search for political, social, and economic equality, we must establish a human rights culture from our perspective as women: victims who know the forms and meanings of discrimination, and who can use this knowledge for our own advancement and for the empowerment of others who have traditionally been the underprivileged in our society.

Namibia's constitution guarantees equality and non-discrimination to both sexes as well as all races. Women need to know about their rights under the law. They need to teach each other about their rights. And they need to assert an active role in shaping and implementing the country's laws. These are the nuts and bolts without which a democratic society cannot be built.

Women must demand a meaningful democratization of all male-dominated structures. We have been largely denied education. Is this to continue? Many girls who do go to school are driven out prematurely when they become pregnant (schooling for the boys, who are equally responsible for the pregnancy, usually continues uninterrupted). Girls need self-esteem to finish their schooling, and self-awareness to avoid becoming pregnant. Those who drop out of school still need education. And some of our young men could do with a dose of responsibility.

Are we to have equal access to a male-dominated labour market? Or are we to be confined to a traditional, subordinate role in the home? Throughout history, women have learned to feed their families on the smallest of budgets, becoming effective managers in domestic economics. Can't these skills be brought to a broader scale?

Are those of us who are supportive and faithful home-makers expected to tolerate infidelity, drunkenness, and domestic violence? Women must know their rights within the family, even when it comes to their sexual relationships.

How well does health care respond to women's needs? Are there enough primary health care centres where we can learn about nutrition for mothers and babies? What about family planning and birth spacing? Can a woman effectively wield the right to control her own fertility? Can women learn about AIDS and other sexually transmitted diseases openly and in time to prevent them from becoming infected? Will women be empowered to insist on the use of condoms without being rejected and disgraced as "cheap" or "loose"?

These are crucial questions for women and for the nation. Women need to be key players in finding the answers to them, because these answers will determine the future for them and for their daughters in this newly-independent country.

Effective campaigning for emancipation will require unity. Party, regional, religious, and racial distinctions must not be permitted to silence us. After all, Afrikanerdom enslaved even white women, preventing them from realizing their potential by demanding compliance with insidious customs crafted to ensure the supremacy of the white male.

This unity will not only give women the voice they need, it will provide a key example of nation-building from this country's main force for progress—its women.

Bience Gawanas is a lawyer and a member of Namibia's Public Service Commission.

On the Environment

The following are available from UNFPA, Technical and Evaluation Division, 220 East 42 Street, New York, NY 10017, USA. Telephone: (212) 297-5215.

- *Population and the Environment: The Challenges Ahead* sets out to introduce readers to the interrelationships among population, resources, and the environment. It discusses the ways in which population pressures affect the environment, outlines policy options, and provides excerpts from key resolutions and statements on population and the environment. Available in English, French, and Spanish at a cost of US$10.00.

- *Population, Resources and the Environment: The Critical Challenges* advances the argument that much of the environmental degradation today is due to two groups of people, the top billion richest and bottom billion poorest. It explores the ways in which population, resource, and environmental issues are linked at different levels of development, discusses critical policy options, and provides excerpts from and references to key resolutions and statements on population and the environment. Available in English, French, and Spanish at a cost of US$24.75.

- *Women, Population and the Environment* argues that there can be no sustainable development for anyone without development for and by women. It examines how UNFPA activities are making the link between women, population, and the environment, and suggests some priorities for future research and operations in this area. Available in English only at a cost of US$5.00.

Resource Reference

The *World Resources 1992-93* report, entitled "Toward Sustainable Development," is the fifth biennial statistical stock-taking of the world's resources and environment by the World Resources Institute, a Washington-based non-governmental organization. Produced in co-operation with the United Nations Environment Programme and the UN Development Programme, the current edition also presents three case studies of what sustainable development might mean in industrialized countries, low-income countries, and rapidly industrializing countries, in addition to a special section on Central Europe. Published by Oxford University Press. For more information, contact: World Resources Institute, 1709 New York Avenue, Washington, D.C. 20006, USA.

Survey of Services

Psychosexual Services in Selected European Countries, published by the World Health Organization with support from UNFPA surveys approaches to psychosexual counselling and available services in Hungary, Ireland, Israel, Poland, and the United Kingdom. Detailed discussions on each country are supplemented with a general list of conclusions and recommendations. One of these recommendations is that more research needs to be done on "what people actually do sexually", since "knowing the reality can prevent people from talking about the community in ideal terms. Such ideal descriptions of communities make individuals feel they are peculiar and abnormal if they do not correspond with the assumed norm." For more information, contact: World Health Organization, Regional Office for Europe, 8 Scherfigsvej, DK-2100 Copenhagen, Denmark.

Honouring Pioneers

The Right to Choose: Pioneers in Women's Health & Family Planning tells the stories of 12 women and men who were at the forefront of the struggle for the free availability of family planning techniques in their countries and around the world. Based on interviews with the pioneers and their colleagues, it was written by Perdita Huston, a former director of public affairs for the International Planned Parenthood Federation, and published by Earthscan paperbacks in association with IPPF, to commemorate the Federation's fortieth anniversary. For more information, contact: IPPF, Regents College, Inner Circle, Regents Park, London NW1 4NS, UK. Telephone: 071-486-0741.

Idiot Box

You may call them idiot boxes, but you have to accept that television sets are everywhere, says the United States-based Center for Population Options, publisher of *Talking with TV: A Guide for Grown-ups and Kids*, or "How to make TV a conversation starter on relationships, values, and sexuality. 1991-1992 Edition." Apart from tips on how to talk with your parents or children about what you're seeing on TV, the booklet contains a one-page summary of research on TV and adolescent sexuality. Among the findings: "In the 1987-1988 season, a typical American adolescent viewed nearly 14,000 instances of sexual material on television. Only 165 of the references referred to topics such as sex education, sexually transmitted disease, birth control, or abortion." Available at a cost of US$4.00 plus 15% postage and handling, from: Center for Population Options, 1025 Vermont Avenue, N.W., Suite 210, Washington, D.C. 20005.

Pushing Partnership

Gerard Piel, founder of *Scientific American* magazine, urges developing and industrialized countries to form a partnership to tackle the problem of rapid population growth in *Only One World: Our Own to Make and to Keep*, a book published by W.H. Freeman Co. in co-operation with the United Nations. Piel argues that population growth is inextricably linked to poverty and the state of the environment. He observes a slowing-down of population growth rates in developing countries that have made significant strides in industrializing, and concludes from this that a substantial transfer of technology from industrialized to developing countries must be made part of the global effort to slow population growth rates. Available in English only at a cost of US$29.95 from: United Nations Publications, Sales Section, Room DC2-853, New York, NY 10017, USA. Telephone: (800) 253-9646. Fax: (212) 963-3489.

Uprooted people

Host country	No. of refugees	Some countries of origin
Pakistan	3,275,700	Afghanistan
Iran	2,850,000	Afghanistan, Kurds
USA/Canada	1,447,200	El Salvador, Guatemala, Vietnam
Europe	894,000	Turkey, Africa, Hong Kong, Sri Lanka, Vietnam
Malawi	822,500	Mozambique
Sudan	767,700	Ethiopia, Chad, Zaire, Uganda
Ethiopia	710,200	Sudan, Somalia
Somalia	600,000	Ethiopia
Mexico	356,400	El Salvador, Guatemala
China	280,500	Vietnam
Costa Rica	278,600	Nicaragua, El Salvador, Cuba
Burundi	267,500	Rwanda, Zaire, Uganda
Australia/New Zealand	102,600	Vietnam
Thailand	99,900	Laos, Cambodia, Myanmar/Burma

Source: UN High Commission for Refugees

DICTIONARY

Total Fertility Rate (TFR)

The TFR comes as close as possible to answering the question: How many children are women having? It is the average number of children that would be born alive to a woman during her lifetime if she were to pass through all her childbearing years (between ages 15 and 49) experiencing each year's fertility rates for women of her age.

TFR, 1990-95:

World	3.3
Africa	6.0
North America	1.8
Latin America	3.2
Asia	3.3
Europe	1.7
Oceania	2.4
USSR (former)	2.3

(**Source:** UNFPA, *The State of World Population 1992*)

Risk

A woman's lifetime risk of dying as a result of a given pregnancy, as of 1988, is 1 in 73. In developing countries, the risk is 1 in 57; in contrast, it is only 1 in 1,825 in the industrialized countries. Regional variations: Africa, 1 in 23. Asia (excluding Japan), 1 in 71. Latin America and the Caribbean, 1 in 131. North America, 1 in 4,006. Europe, 1 in 2,288. Oceania (excluding Australia and New Zealand), 1 in 32. The former Soviet Union, 1 in 863. (Source: World Health Organization, *Maternal Mortality Ratios and Rates: A Tabulation of Available Information*, 3rd ed., 1991.)

TV Sex

In the 1987-1988 television season, a typical American adolescent saw nearly 14,000 instances of sexual material on TV. Only 165 of these referred to topics such as sex education, sexually transmitted diseases, contraception, or abortion. (Source: Center for Population Options, Washington, D.C.) See "Publications", page 19.

Soil Degradation

Between 1945 and the late 1980s, 17 per cent of Earth's vegetated land, agricultural and natural, suffered soil degradation as a result of human activity. Water erosion accounted for 56% of the damage; wind erosion, 28%; chemical degradation, 12%; and physical degradation (eg: compaction and waterlogging), 4%. (Source: World Resources Institute, United Nations Environment Programme, UN Development Programme, *World Resources 1992-93.*)

Quote

"Perhaps two simple truths need to be writ large over the portals of every international gathering about the environment: we will not slow the birth rate until we address poverty. And we will not protect the environment until we address the issues of population growth and poverty in the same breath. I do wish that these simple and incontestable truths could find greater prominence on the Rio agenda. Sadly, it seems that certain delegations are determined to prevent discussion of population growth. In so doing, of course, they deny everyone else the opportunity for constructive discussion of policies which would address the environment, poverty and population growth together, rather than in isolation."

—Britain's Prince Charles, speaking to the World Commission on Environment and Development (the Brundtland Commission), 22 April 1992.

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